

REMARKS

By this Amendment, Applicants have canceled claim 82 without prejudice or disclaimer and amended claims 60, 83, and 120. No new matter has been added. Claims 60-64, 67-81, and 83-121 are present in the application. Of those claims, claims 93-96 have been withdrawn from consideration as being directed to non-elected subject matter. Thus, claims 60-64, 67-81, 83-92, and 97-121 remain present and pending on the merits in the present application.

As an initial matter, Applicants appreciate the Examiner's reconsideration and withdrawal of the claim rejections included in the Office Action of April 30, 2009. For at least the reasons outlined herein, Applicants respectfully submit that all of the pending claims are allowable, and thus, Applicants request reconsideration and withdrawal of the claim rejections included in the Office Action of January 25, 2010.

I. Rejections of Independent Claims 60 and 119-121

Claims 60 and 119-121 are the only independent claims pending in the present application. Those independent claims have been included in the following claim rejections:

1. Claims 60-64, 70, 73-79, 84, 92, and 121 were rejected under 35 U.S.C. § 102(b) based on JP 10-264612 ("JP' 612") (Office Action at 2);
2. Claims 60-64, 67-70, 73-79, 82-85, and 121 were rejected under 35 U.S.C. § 103(a) based on European Pat. App. No. EP 0 688 686 A2 ("EP '686") in combination with U.S. Patent No. 5,256,221 to Trabant ("Trabant") and JP 56-131406 ("JP '406") (id. at 4);

3. Claims 120 and 121¹ were rejected under 35 U.S.C. § 102(b) based on U.S. Patent No. 6,607,018 to Fukunaga et al. ("Fukunaga") (id. at 6);
4. Claim 119² was rejected under 35 U.S.C. § 103(a) based on Fukunaga in combination with either JP '406 or JP 05-301508 ("JP '508") (id.);
5. Claims 60-64, 67-70, 73-79, 82, 83, 92, 97, and 98 were rejected under 35 U.S.C. § 103(a) based on Fukunaga in combination with JP '612 and JP 06-135207 ("JP '207") (id. at 7); and
6. Claims 99-106, 109-111, 113-117, and 119-121 were rejected under 35 U.S.C. § 103(a) based on Fukunaga in combination with JP '612, JP '207, and "at least one of" JP '508, U.S. Patent No. 6,619,352 to Diensthuber et al. ("Diensthuber '352"), U.S. Patent No. 5,660,651 to Diensthuber ("Diensthuber '651"), and JP '406.

Id. at 9. For at least the reasons outlined below, Applicants respectfully submit that each of independent claims 60 and 119-121, as well as the rejected claims that depend therefrom, is patentably distinguishable from the references relied on in those claim rejections.

A. Independent Claim 60

Independent claim 60 was rejected under § 102(b) based on JP' 612, under § 103(a) based on EP '686 in combination with Trabant and JP '406, and under

¹ The rejection statement indicates that claims 121 and 122 are rejected under § 102(b) based on Fukunaga. However, during a conversation with Examiner Maki on April 7, 2010, he indicated that claims 120 and 121 are rejected under § 102(b) based on Fukunaga, rather than claims 121 and 122. (At this time, there is no claim 122 pending in the application.)

² The rejection statement indicates that claim 120 is rejected under § 103(a) based on Fukunaga in combination with JP '406 or JP '508. However, during a conversation with Examiner Maki on April 7, 2010, he indicated that claim 119 is rejected under § 103(a) based on Fukunaga in combination with JP '406 or JP '508, rather than claim 120.

§ 103(a) based on Fukunaga in combination with JP '612 and JP '207. Although Applicants do not necessarily believe that these claim rejections are proper, Applicants have amended independent claim 60 to incorporate the subject matter previously recited in claim 82 in order to promote an expedited issuance of a Notice of Allowance. Applicants respectfully submit that independent claim 60, as amended, is further distinguishable from the JP '612, EP '686, Fukunaga, and JP '207 references, regardless of whether they are viewed individually or in combination.

1. Rejection under § 102(b) based on JP '612

Independent claim 60 has been amended to include the subject matter previously recited in claim 82. Claim 82 was not included in the rejection under § 102(b) based on JP '612. For at least this reason, amended independent claim 60 is patentably distinguishable from JP '612. More specifically, JP '612 does not disclose a tyre for a vehicle wheel, "wherein [*inter alia*] the plurality of cuts [(which bound intermediate blocks of an elongated ridge)] comprises first and second cuts, wherein the first cuts are substantially perpendicular to the circumferential extension direction, and wherein the second cuts are substantially perpendicular to . . . oblique grooves," as recited in amended independent claim 60. For example, JP '612 fails to disclose cuts bounding intermediate blocks, which are substantially perpendicular to the circumferential extension direction of the tyre.

For at least these reasons, independent claim 60 is patentably distinguishable from JP '612. Therefore, Applicants respectfully request reconsideration and withdrawal of the rejection of independent claim 60 under § 102(b) based on JP '612. In addition, rejected claims 61-64, 70, 73-79, 84, and 92 depend from independent claim 60. Thus,

those dependent claims should be patentably distinguishable from JP '612 for at least the same reasons as independent claim 60. Therefore, Applicants respectfully request reconsideration and withdrawal of the rejection of dependent claims 61-64, 70, 73-79, 84, and 92 under § 102(b) based on JP '612.

2. Rejection under § 103(b) based on EP '686, Trabant, and JP '406

Although claim 82 was included in the claim rejection under § 103(b) based on EP '686, Trabant, and JP '406, Applicants respectfully submit that independent claim 60, which recites the subject matter previously recited in claim 82, is patentably distinguishable from EP '686, Trabant, and JP '406, regardless of whether those references are viewed individually or in combination. In particular, the rejection statement's hypothetical modification to the tire disclosed in EP '686 is contrary to the teachings of that reference. Thus, independent claim 60, as amended, is not *prima facie* obvious based on EP '686 in view of Trabant and JP '406, regardless of what the Trabant and JP '406 references disclose.

Under 35 U.S.C. § 103(a), several basic factual determinations must be made in order to evaluate whether a claim is obvious. The M.P.E.P. provides guidelines for making these factual determinations. For example, the M.P.E.P. cautions that in order to avoid impermissible hindsight reasoning, these factual determinations must be made with respect to "the time the invention was made." § 2141.01(III). Moreover, the M.P.E.P. cautions that when "determining the differences between the prior art and the claims, the question [of obviousness] is not whether the differences themselves would have been obvious, but [rather, it is] whether the claimed invention as a whole would have been obvious." § 2141.02(I). Indeed, when considering the prior art, [a] prior art

reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention." Id. § 2143.03(VI) (second emphasis added).

Once the Graham factual inquiries have been resolved, it must be determined whether a claim is *prima facie* obvious. § 2141(III). Following the guidance of the above-outlined framework, the M.P.E.P. advises that in order to establish a *prima facie* case of obviousness, "the examiner must step backward in time and into the shoes worn by the hypothetical 'person of ordinary skill in the art' when the invention was unknown and just before it was made." § 2142. Further, "the examiner must then make a determination whether the claimed invention 'as a whole' would have been obvious at that time to that person," but "[k]nowledge of applicant's disclosure must be put aside in reaching this determination" because "impermissible hindsight must be avoided and a legal conclusion must be reached on the basis of the facts gleaned from the prior art"; not on the basis of applicant's disclosure. Id.

In view of this guidance, the M.P.E.P. further advises that "[i]f a proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious." § 2143.01(VI). In other words, if the prior art teaches away from a proposed modification, then the prior art does not render a claim *prima facie* obvious.

Applicants respectfully submit that EP '686 teaches away from the rejection statement's hypothetical modification to its tread. Therefore, regardless of what Trabant

and JP '406 disclose, it would not have been *prima facie* obvious to modify the EP '686 tread in the hypothetical manner proposed in the rejection statement.

Referring to the rejection statement, it concedes that EP '686 does not disclose "trapezoidal shaped intermediate blocks," but asserts that

[i]t would have been an obvious alternative . . . to divide the elongated ridge bounded by two oblique grooves with transverse grooves such that the ridge comprises substantially trapezoidal shaped intermediate blocks since (1) Trabant teaches dividing a ridge between oblique grooves of a tire tread with transverse grooves such that trapezoidal shaped blocks are defined to provide high traction and self cleaning and (2) Japan 406 shows dividing an elongated ridge of a tire tread (albeit a circumferential ridge instead of an oblique ridge) with grooves such that the blocks either have a parallelogram shape (Figure 1) or trapezoidal shape (Figure 2).

Office Action at 4-5. Applicants respectfully traverse this claim rejection and submit that due to the express teachings of EP '686, it would not have been obvious to make such modifications to the tread of EP '686 at least because such modifications are contrary to the express teachings of EP '686.

Referring to EP '686, it discloses a tire for running on ice and snow roads that has a tread pattern defined in a tread portion by a pair of circumferential grooves 1 dividing the tread into a central region TC and side regions TS, slant grooves 2 and 3 arranged in the central region TC at a given interval in the circumferential direction in each of the blocks defined by the circumferential grooves 1 and the slant grooves 2 and 3. See, e.g., EP '686 at Abstract. According to EP '686, the first slant grooves 2 have a small inclination angle of 20-30 degrees, and the second slant grooves 3 have a large inclination angle of 75-85 degrees with respect to the circumferential direction. Id.

The slant grooves 2 and 3 are arranged so that the inclinations of the first and second slant grooves 2 and 3 are opposite each other. Id.

EP '686 teaches that by virtue of the first slant grooves 2 having an inclination angle of 20-30 degrees and the second slant grooves having an inclination angle of 75-85 degrees, the edge effect in the lateral direction of the tire, or the increase of the lateral gripping force, is caused by an edge component of the slant groove in the circumferential direction of the tire. Id. at p. 3, ll. 31-36. In addition, the edge effect in the circumferential direction of the tire, or the improvement of traction and braking performance on ice road surface in forward and backward directions of vehicles, is caused by an edge component of the slant grooves in the lateral direction. Id. at p. 3, ll. 36-39. According to EP '686, such an effect is not present in straight, circumferential grooves. Id. at p. 3, l. 39.

Applicant respectfully submits that it would not have been *prima facie* obvious to modify the inclination angles of the first and second slant grooves 2 and 3 because EP '686 teaches away from altering the inclination angles to differ from the 20-30 degree inclination range of the first slant grooves 2 or the 75-85 degree inclination of the range of the second slant grooves. In particular, EP '686 cautions that when the inclination angle of the first slant grooves 2 is less than 20 degrees, the edge effect in the circumferential direction for braking and traction performance in the forward and backward directions of the vehicle is "extremely degraded." Id. at p. 3, ll. 49-51. EP '686 further advises that when the inclination angle of the second slant grooves 3 exceeds 30 degrees, "the edge effect in the lateral direction is insufficient[,] and there is a fear of causing lateral slipping." Id. at p. 3, ll. 52-53.

Regarding the inclination angle of the second slant grooves 3, EP '686 cautions that if the inclination angle of the second slant grooves 3 is less than 75 degrees with respect to the circumferential direction, there is insufficient edge effect in the circumferential direction to develop braking and traction performance on icy road surfaces. Id. at p. 3, ll. 45-47. EP '686 further cautions that when the inclination angle of the second slant grooves 3 exceeds 85 degrees, the influence of the first slant grooves 2 on the forward direction of the vehicle cannot be sufficiently offset. Id. at p. 3, ll. 47-48.

Thus, one skilled in the art would understand, based on the express teachings of EP '686, that changing the inclination angle of the first or second slant grooves 2 and 3 to an amount outside the ranges of 20-30 degrees and 75-85 degrees, respectively, would have a detrimental effect on the performance characteristics of the tire disclosed in EP '686. Thus, EP '686 teaches away from such modifications.

Applicant respectfully submits that the rejection statement's hypothetical modification to the tires disclosed in EP '686 would result in changing the inclination angles of the first and second slant grooves in a manner that would result in the inclination angles being outside the ranges taught by EP '686. In particular, if for argument's sake, the first and second slant grooves were to hypothetically correspond to the oblique grooves and cuts defining the intermediate blocks of the elongated ridge recited in amended claim 60, altering either the first or second slant grooves, so that the "first cuts are substantially perpendicular to the circumferential extension direction," would result in the slant grooves falling outside the inclination angle ranges required by the EP '686 tire. Thus, such a modification would be contrary to the express teachings

of EP '686. As a result, regardless of teachings of Trabant and JP '406, it would not have been *prima facie* obvious to modify the tread pattern of the tire disclosed in EP '686 in the hypothetical manner proposed in the rejection statement.

For at least the above-outlined reasons, Applicants respectfully submit that independent claim 60, as amended, is not *prima facie* obvious based on EP '686, Trabant, and JP '406, regardless of whether those references are viewed individually or as a whole. Therefore, Applicants respectfully request reconsideration and withdrawal of the § 103(a) rejection of claim 60 based on those references. In addition, rejected claims 61-64, 67-70, 73-79, and 82-85 depend from independent claim 60. Thus, those dependent claims should be patentably distinguishable from EP '686, Trabant, and JP '406 for at least the same reasons as independent claim 60. Therefore, Applicants respectfully request reconsideration and withdrawal of the rejection of dependent claims 61-64, 67-70, 73-79, and 82-85 under § 103(a) based on EP '686, Trabant, and JP '406.

3. Rejection under § 103(b) based on Fukunaga, JP '612, and JP '207

Although claim 82 was also included in the claim rejection under § 103(b) based on Fukunaga, JP '612, and JP '207, Applicants respectfully submit that independent claim 60, as amended to recite the subject matter previously recited in claim 82, is patentably distinguishable from Fukunaga, JP '612, and JP '207, regardless of whether those references are viewed individually or as a whole. In particular, Fukunaga fails to disclose all of the subject matter recited in amended independent claim 60, and further, modifying the tread design disclosed in Fukunaga would be contrary to the express teachings of that reference. Thus, independent claim 60, as amended, is not *prima*

facie obvious based on Fukunaga in view of JP '612 and JP '207, regardless of what the JP '612 and JP '207 references disclose.

The rejection statement asserts that Fukunaga discloses trapezoidal-shaped intermediate blocks because “the distance between the oblique grooves in Fukunaga et al decreases toward the ground contact center line SL” Office Action at 8. However, the rejection statement does not explain how Fukunaga discloses the subject matter recited in claim 82, which is now incorporated into independent claim 60. In particular, the rejection statement does not explain how Fukunaga purportedly discloses a tyre for a vehicle wheel, “wherein [a] plurality of cuts [(which bound intermediate blocks of an elongated ridge)] comprises first and second cuts, wherein the first cuts are substantially perpendicular to the circumferential extension direction, and wherein the second cuts are substantially perpendicular to . . . oblique grooves [(bounding the elongated ridge)],” as recited in amended independent claim 60. Applicants respectfully submit that Fukunaga does not disclose such subject matter, and further, such subject matter is not *prima facie* obvious based on Fukunaga, JP '612, and JP '207, regardless of whether those references are viewed individually or as a whole. Indeed, Fukunaga teaches away from any hypothetical modification to the Fukunaga tread that would result in the recited subject matter. Therefore, regardless of what JP '612 and JP '207 disclose, it would not have been *prima facie* obvious to modify the Fukunaga in such a way that would result in the subject matter recited in independent claim 60, as amended.

Fukunaga discloses a tread for improving wet condition drainage ability. (See, e.g., col. 3, ll. 19-22). Fukunaga discloses that this is achieved by virtue of the tread

shown in Fig. 1 of Fukunaga. In particular, the tread shown in Fig. 1 includes on an inboard side 12R, continuous lateral main grooves 22 that extend from a central circumferential main groove 14 to a ground contact edge 27R. Fukunaga at col. 5, ll. 21-33. The angle that each lateral groove 22 forms with respect to the tire circumferential direction gradually increases, within a range of 55° to 90°. Id. at col. 5, ll. 38-42. On an outboard side 12L, lateral main grooves 24 extend between the central circumferential main groove 14 to a ground contact edge 27L. Id. at col., ll. 23-41. The angle that each lateral main groove 24 forms with respect to the tire circumferential direction gradually increases, within a range of 55° to 90°. Id. at col. 6, ll. 42-45. Fukunaga further discloses that this combination of lateral grooves 22 and main lateral grooves 24, by virtue of extending between central circumferential main groove 14 and respective inboard and outboard ground contact edges 27R and 27L, at the prescribed 55° to 90°-gradually increasing angle, results in “water [being] drained from the central circumferential main groove 14 to the tire axial direction outer side very effectively.” Id. at col. 3, ll. 19-22; col. 4, ll. 15-18. Further, Fukunaga cautions that “[i]f the angle of the inboard lateral grooves 22 with the tire circumferential direction is outside the range 55° to 90°, water in the vicinity of the ground contact center cannot be drained very effectively.” Id. at col. 10, ll. 4-7.

Thus, Fukunaga discloses that the continuous nature and the gradually increasing angle with respect to the circumferential main groove 14 of the inboard lateral grooves 22 and the outboard lateral grooves 24 is critical to achieving and expressly disclosed object of Fukunaga’s tread, namely, “wet condition drainage ability” (col. 1, l. 34).

Applicants respectfully submit that if for the sake of argument, Fukunaga's tread were modified in such a manner as to include the subject matter recited in amended claim 60, it would defeat this expressly disclosed object. In particular, if Fukunaga's main lateral grooves 24 were altered such that first ones of the main lateral grooves 24 were to be substantially perpendicular to the circumferential extension direction of the tire, and second ones of the main lateral grooves 24 were to be substantially perpendicular to the outboard longitudinal grooves 20, as recited in amended claim 60, the main lateral grooves 24 would no longer conform to the express teachings of Fukunaga. The express teachings of Fukunaga advise that the gradually increasing angle of the main lateral grooves 24 with respect to the central circumferential main groove 14 is critical to achieving Fukunaga's desired wet condition drainage ability. See, e.g., col. 3, ll. 19-22; col. 4, ll. 15-18. Indeed, if the main lateral grooves 24 were modified such that they formed grooves according to the first and second cuts recited in amended claim 60, the main lateral grooves 24 would no longer provide a gradually increasing angle with respect to the central circumferential main groove 14, thereby hindering the Fukunaga tread's wet condition drainage ability, at least according to Fukunaga's disclosed principle of operation. For at least this reason, one of ordinary skill in the art would have understood that Fukunaga teaches away from any hypothetical modification to the main lateral grooves 24 that would result in the subject matter recited in amended claim 60, at least because Fukunaga discloses that the disclosed configuration of the main lateral grooves 24 is critical to achieving Fukunaga's objective of providing a tread having improved wet condition drainage capability.

For at least the above-outlined reasons, Applicants respectfully submit that independent claim 60, as amended, is not *prima facie* obvious based on Fukunaga, JP '612, and JP '207, regardless of whether those references are viewed individually or as a whole. Therefore, Applicants respectfully request reconsideration and withdrawal of the § 103(a) rejection of claim 60 based on those references. In addition, rejected claims 61-64, 67-70, 73-79, 82, 83, 92, 97, and 98 depend from independent claim 60. Thus, those dependent claims should be patentably distinguishable from Fukunaga, JP '612, and JP '207 for at least the same reasons as independent claim 60. Therefore, Applicants respectfully request reconsideration and withdrawal of the rejection of dependent claims 61-64, 67-70, 73-79, 82, 83, 92, 97, and 98 under § 103(a) based on Fukunaga, JP '612, and JP '207.

B. Independent Claim 119

Independent claim 119 was rejected under 35 U.S.C. § 103(a) based on Fukunaga in combination with either JP '406 or JP '508 (Office Action at 6), and under 35 U.S.C. § 103(a) based on Fukunaga in combination with JP '612, JP '207, and “at least one of” JP '508, Diensthuber '352, Diensthuber '651, and JP '406. Id. at 9. Applicant traverses each of these rejections of independent claim 119 at least because Fukunaga teaches away from the rejection statement’s hypothetical modification to the tread of Fukunaga.

Independent claim 119 is directed to a tyre including, *inter alia*, a

second geometric module comprising:

a plurality of third shoulder blocks; and

a plurality of inner blocks;

wherein the third shoulder blocks are circumferentially aligned along a second side edge of the tread band,

wherein the third shoulder blocks are bounded by third grooves oriented substantially transversely to the circumferential extension direction,

wherein the plurality of inner blocks are distributed along at least one circumferential row separated from the third shoulder blocks by a second circumferential shoulder groove,

wherein the inner blocks are bounded by fourth grooves oriented substantially transversely to the circumferential extension direction, and

wherein the third substantially transverse grooves are circumferentially offset relative to the fourth substantially transverse grooves.

Applicant respectfully submits that Fukunaga fails to disclose or render obvious “third substantially transverse grooves . . . circumferentially offset relative to . . . fourth substantially transverse grooves,” as recited in independent claim 119. Moreover, modifying the tread of Fukunaga in a manner that would result in such a configuration would be contrary to the express teachings of Fukunaga, and thus, such a modification would not have been obvious to a person having ordinary skill in the art.

1. § 103(a) Rejection based on Fukunaga and JP '406 or JP '508

The rejection statement asserts that

it would have been obvious to provide the transverse grooves in the circumferential block rows such that they are offset in view of (1) Japan 406's teaching to offset transverse rows of adjacent rows, which one of ordinary skill in the art would readily appreciate enhances slip resistance and/or reduces noise; it being taken as well known / conventional per se in the tread art that circumferentially offsetting transverse grooves in one row relative to another row reduces noise or (2) Japan 508's suggestion to slightly offset

lateral groove[s] with respect to shoulder circumferential grooves (Figure 1); it being taken as well known / conventional per se in the tread art that circumferentially offsetting transverse grooves in one row relative to another row reduces noise.

Office Action at 7. Applicants respectfully disagree with these assertions and traverse the claim rejection because regardless of what JP '406 and JP '508 disclose relating to offsetting grooves, Fukunaga teaches away from offsetting grooves in a manner that would result in the subject matter recited in independent claim 119.

As outlined above, Fukunaga discloses a tread for improving wet condition drainage ability. See, e.g., Fukunaga at col. 3, ll. 19-22. In particular, Fukunaga teaches that the disclosed combination of lateral grooves 22 and main lateral grooves 24, by virtue of extending between central circumferential main groove 14 and respective inboard and outboard ground contact edges 27R and 27L, at the prescribed 55° to 90°-gradually increasing angle, results in "water [being] drained from the central circumferential main groove 14 to the tire axial direction outer side very effectively." Id. at col. 3, ll. 19-22; col. 4, ll. 15-18. Fukunaga also advises that "[i]f the angle of the inboard lateral grooves 22 with the tire circumferential direction is outside the range 55° to 90°, water in the vicinity of the ground contact center cannot be drained very effectively." Id. at col. 10, ll. 4-7.

Thus, Fukunaga discloses that the continuous nature and the gradually increasing angle with respect to the circumferential main groove 14 of the inboard lateral grooves 22 and the outboard lateral grooves 24 is critical to achieving and expressly disclosed object of Fukunaga's tread, namely, "wet condition drainage ability" (col. 1, l. 34). As a result, Applicants respectfully submit that if for the sake of argument,

Fukunaga's tread were modified in the hypothetical manner proposed in the rejection statement, it would defeat this expressly disclosed object. In particular, if the inboard lateral grooves 22 were modified such that they formed grooves that were "circumferentially offset," as recited in independent claim 119, they would be discontinuous. By virtue of being discontinuous, they would stray from the express teachings of Fukunaga, which suggests that the gradually increasing angle of the lateral grooves 22 with respect to the central circumferential main groove 14 is critical to achieving Fukunaga's desired wet condition drainage ability. Indeed, if the outboard lateral grooves 24 were modified such that they formed grooves that were circumferentially offset, Fukunaga's outboard land portions 28 would effectively block the outboard lateral grooves 24, thereby hindering the Fukunaga tread's wet condition drainage ability. For at least this reason, one of ordinary skill in the art would have understood that Fukunaga teaches away from the rejection statement's proposed, hypothetical modification to the outboard lateral grooves 24, which are critical to achieving Fukunaga's objective to provide a tread having improved wet condition drainage capability. Thus, regardless of what JP '406 and JP '508 disclose, it would not have been *prima facie* obvious to modify the tread of Fukunaga in the hypothetical manner proposed in the rejection statement.

For at least the above-outlined reasons, Applicants respectfully submit that independent claim 119 is not *prima facie* obvious based on Fukunaga, JP '406, and JP '508, regardless of whether they are viewed individually or as a whole. Therefore, Applicants respectfully request reconsideration and withdrawal of the § 103(a) rejection of claim 119 based on those references.

**2. § 103 Rejection based on Fukunaga, JP '612, JP '207, JP '508,
Diensthuber '352, Diensthuber '651, and JP '406**

The rejection statement asserts that the subject matter recited in independent claim 119 would have been obvious for reasons similar to those outlined above with respect to the claim rejection based on Fukunaga, JP '406, and JP '508. See Office Action at 9-10. For at least the reasons outlined above with respect to the § 103(a) rejection of claim 119 based on Fukunaga, JP '406, and JP '508, Applicants respectfully submit that the rejection statement's hypothetical modification to the tread design of Fukunaga would not have been *prima facie* obvious to a person having ordinary skill in the art. In particular, regardless of what JP '612, JP '207, JP '508, Diensthuber '352, Diensthuber '651, and JP '406 disclose relating to offsetting grooves, Fukunaga teaches away from offsetting grooves in a manner that would result in the subject matter recited in independent claim 119. Thus, Applicants respectfully submit that independent claim 119 is not *prima facie* obvious based on Fukunaga, JP '612, JP '207, JP '508, Diensthuber '352, Diensthuber '651, and JP '406, regardless of whether they are viewed individually or as a whole. Therefore, Applicants respectfully request reconsideration and withdrawal of the § 103(a) rejection of claim 119 based on those references.

C. Independent Claim 120

Independent claim 120 was rejected under 35 U.S.C. § 102(b) based on Fukunaga (Office Action at 6), and under 35 U.S.C. § 103(a) based on Fukunaga in combination with JP '612, JP '207, and "at least one of" JP '508, Diensthuber '352, Diensthuber '651, and JP '406. Id. at 9. Although Applicants do not necessarily believe

that these rejections are proper, Applicants have amended independent claim 120 to include the subject matter previously recited in claim 100. In particular, independent claim 120, as amended, is directed to a tyre including, *inter alia*, a

second geometric module compris[ing]:

a plurality of third shoulder blocks; and

a plurality of inner blocks;

wherein the third shoulder blocks are circumferentially aligned along [a] second opposing side edge of the tread band,

wherein the third shoulder blocks are bounded by third grooves oriented substantially transversely to the circumferential extension direction,

wherein the plurality of inner blocks are distributed along at least one circumferential row separated from the third shoulder blocks by a second circumferential shoulder groove,

wherein the inner blocks are bounded by fourth grooves oriented substantially transversely to the circumferential extension direction, and

wherein the fourth substantially transverse grooves bounding the inner blocks of the first circumferential row are circumferentially offset relative to the fourth substantially transverse grooves bounding the inner blocks of the second circumferential row, and

wherein the fourth substantially transverse grooves bounding the inner blocks of the first circumferential row are circumferentially offset relative to the third substantially transverse grooves.

Applicant respectfully submits that Fukunaga fails to disclose or render obvious “fourth substantially transverse grooves bounding . . . inner blocks of [a] first circumferential row [that] are circumferentially offset relative to . . . third substantially transverse grooves,” as recited in amended independent claim 120. Moreover, modifying the tread

of Fukunaga in a manner that would result in such a configuration would be contrary to the express teachings of Fukunaga, and thus, such a modification would not have been obvious to a person having ordinary skill in the art.

1. Claim Rejection under 35 U.S.C. § 102(b) based on Fukunaga

As noted above, Applicants have amended independent claim 120 to include the subject matter recited in claim 100. Claim 100 has not been rejected under 35 U.S.C. § 102(b) based on Fukunaga. For at least this reason, Applicants respectfully request reconsideration and withdrawal of the rejection of independent claim 120 under § 102(b) based on Fukunaga.

2. § 103 Rejection based on Fukunaga, JP '612, JP '207, JP '508, Diensthuber '352, Diensthuber '651, and JP '406

The rejection statement asserts that the subject matter recited in independent claim 120 would have been obvious for reasons similar to those outlined above with respect to the rejection of independent claim 119 under § 103(a) based on Fukunaga, JP '612, JP '207, JP '508, Diensthuber '352, Diensthuber '651, and JP '406. See Office Action at 9-10. For at least the reasons outlined above with respect to the § 103(a) rejection of claim 119 based on Fukunaga, JP '406, and JP '508, Applicants respectfully submit that the rejection statement's hypothetical modification to the tread design of Fukunaga would not have been *prima facie* obvious to a person having ordinary skill in the art. In particular, regardless of what JP '612, JP '207, JP '508, Diensthuber '352, Diensthuber '651, and JP '406 disclose relating to offsetting grooves, Fukunaga teaches away from offsetting grooves in a manner that would result in the subject matter recited in independent claim 120, as amended. Thus, Applicants respectfully submit that independent claim 120 is not *prima facie* obvious based on Fukunaga, JP '612, JP '207,

JP '508, Diensthuber '352, Diensthuber '651, and JP '406, regardless of whether they are viewed individually or as a whole. Therefore, Applicants respectfully request reconsideration and withdrawal of the § 103(a) rejection of independent claim 120 based on those references.

C. Independent Claim 121

Independent claim 121 was included in the following claim rejections:

1. the rejection under 35 U.S.C. § 102(b) based on JP' 612 (Office Action at 2);
2. the rejection under 35 U.S.C. § 103(a) based on EP '686 in combination with Trabant and JP '406 (id. at 4);
3. the rejection under 35 U.S.C. § 102(b) based on Fukunaga (id. at 6); and
4. the rejection under 35 U.S.C. § 103(a) based on Fukunaga in combination with JP '612, JP '207, and "at least one of" JP '508, Diensthuber '352, Diensthuber '651, and JP '406.

Id. at 9. Applicants respectfully traverse these rejections of independent claim 121 for at least the reasons outlined below.

1. Claim Rejection under § 102(b) based on JP '612

Applicants respectfully traverse the rejection of independent claim 121 under § 102(b) based on JP '612 because JP '612 fails to disclose all of the subject matter recited in independent claim 121. For example, independent claim 121 recites, *inter alia*,

a tread-band pattern . . . compris[ing]: . . . [a] first
geometric module compris[ing]:

an elongated ridge;
an end block;
an auxiliary block; and
at least two shoulder blocks . . . ,

wherein the end block defines an axially external end of the elongated ridge, substantially in axial alignment with one of said at least two shoulder blocks; [and]

wherein the auxiliary block is disposed circumferentially close to the end block, substantially in axial alignment with another of said at least two shoulder blocks

JP '612 fails to disclose an end block and an auxiliary block having the characteristics recited in independent claim 121. Further the rejection statement fails to explain how JP '612 purportedly discloses such subject matter. For at least these reasons, JP '612 fails to disclose all of the subject matter recited in independent claim 121. Therefore, Applicants respectfully request reconsideration and withdrawal of the § 102(b) rejection of independent claim 121 based on JP '612.

2. Claim Rejection under § 103(a) based on EP '686, Trabant, and JP '406

Applicants respectfully traverse the rejection of independent claim 121 under § 103(a) based on EP '686, Trabant, and JP '406 because those references, regardless of whether they are viewed individually or in combination, fail to disclose or render obvious all of the subject matter recited in independent claim 121. For example, independent claim 121 recites, *inter alia*,

a tread-band pattern . . . compris[ing]: . . . [a] first geometric module compris[ing]:

an elongated ridge;
an end block;

an auxiliary block; and

at least two shoulder blocks . . . ,

wherein the end block defines an axially external end of the elongated ridge, substantially in axial alignment with one of said at least two shoulder blocks; [and]

wherein the auxiliary block is disposed circumferentially close to the end block, substantially in axial alignment with another of said at least two shoulder blocks

None of the EP '686, Trabant, and JP '406 references discloses an end block in substantially axial alignment with a shoulder block, and an auxiliary block in substantially axial alignment with another shoulder block. Further, the rejection statement fails to explain how those references purportedly disclose or render *prima facie* obvious such subject matter. Therefore, Applicants respectfully request reconsideration and withdrawal of the § 103(a) rejection of independent claim 121 based on EP '686, Trabant, and JP '406.

3. Claim Rejection under § 102(b) based on Fukunaga

Applicants respectfully traverse the rejection of independent claim 121 under § 102(b) based on Fukunaga because Fukunaga fails to disclose all of the subject matter recited in independent claim 121. For example, independent claim 121 recites, *inter alia*,

a tread-band pattern . . . compris[ing]: . . . [a] first geometric module compris[ing]:

an elongated ridge;

an end block;

an auxiliary block; and

at least two shoulder blocks . . . ,

wherein the end block defines an axially external end of the elongated ridge, substantially in axial alignment with one of said at least two shoulder blocks; [and]

wherein the auxiliary block is disposed circumferentially close to the end block, substantially in axial alignment with another of said at least two shoulder blocks

Fukunaga fails to disclose shoulder blocks in the relationship recited with respect to an end block, an auxiliary block, and an elongated ridge comprising intermediate blocks. Further, the rejection statement fails to explain how Fukunaga purportedly discloses such subject matter. For at least these reasons, Fukunaga fails to disclose all of the subject matter recited in independent claim 121. Therefore, Applicants respectfully request reconsideration and withdrawal of the § 102(b) rejection of independent claim 121 based on Fukunaga.

4. § 103 Rejection based on Fukunaga, JP '612, JP '207, JP '508, Diensthuber '352, Diensthuber '651, and JP '406

For at least the reasons outlined above with respect to the rejections of independent 121 under § 102(b) based on JP '612 and Fukunaga, those references fail to disclose all of the subject matter recited in claim 121. None of the JP '207, JP '508, Diensthuber '352, Diensthuber '651, or JP '406 references overcomes the above-noted deficiencies of JP '612 and Fukunaga. Further, the rejection statement fails to explain how the references relied on in the claim rejection purportedly disclose or render *prima facie* obvious the subject matter recited in independent claim 121. Therefore, Applicants respectfully request reconsideration and withdrawal of the § 103(a) rejection of independent claim 121 based on Fukunaga in combination with JP '612, JP '207, and “at least one of” JP '508, Diensthuber '352, Diensthuber '651, and JP '406.

II. Claim Rejections Limited to Dependent Claims

The Office Action also includes the following claim rejections, which are limited to dependent claims:

1. Claims 71, 72, 80, and 81 were rejected under 35 U.S.C. § 103(a) based on JP' 612 in combination with European Pat. No. EP 0 114 594 B1 (EP '594) (Office Action at 3);
2. Claims 84-89 and 91 were rejected under 35 U.S.C. § 103(a) based on JP '612 in combination with European Pat. App. No. 0 775 600 A1 ("EP '600") and Diensthuber '651 (id.);
3. Claims 85-91 were rejected under 35 U.S.C. § 103(a) based on EP '686 in combination with Trabant, JP '406, EP '600, and Diensthuber '651 (id. at 5);
4. Claims 71, 72, 80, and 81 were rejected under 35 U.S.C. § 103(a) based on EP '686 in combination with Trabant, JP '406, and EP '594 (id.);
5. Claim 92 was rejected under 35 U.S.C. § 103(a) based on EP '686 in combination with Trabant, JP '406, and JP '207 (id. at 6);
6. Claims 84-91 were rejected under 35 U.S.C. § 103(a) based on Fukunaga in combination with JP '612, JP '207, and Diensthuber '651 (id. at 8);
7. Claims 107 and 108 were rejected under 35 U.S.C. § 103(a) based on Fukunaga in combination with JP '612, JP '207, JP '508, Diensthuber '352, Diensthuber '651, JP '406, and JP '207 (id. at 10); and

8. Claims 112 and 118 were rejected under 35 U.S.C. § 103(a) based on Fukunaga in combination with JP '612, JP '207, and "at least one of" JP '508, Diensthuber '352, Diensthuber '651, JP '406, and EP '594. Id.

Each of the rejected dependent claims depends from independent claim 60. Thus, each of the dependent claims is patentably distinguishable from cited references for at least the same reasons as independent claim 60. Therefore, Applicants respectfully request reconsideration and withdrawal of the rejections of the dependent claims.

III. Conclusion

For at least the above-outlined reasons, independent claims 60 and 119-121 should be allowable. Further, claims 61-64, 67-81, 83-92, and 97-118 depend from allowable independent claim 60. Thus, those dependent claims should be allowable for at least the same reasons as independent claim 60. Further, withdrawn claims 93-96 also depend from allowable independent claim 60, which is generic with respect to those claims. Thus, dependent claims 93-96 should be allowable for at least the same reasons as independent claim 60. Accordingly, Applicants respectfully request reconsideration of this application, withdrawal of the claim rejections, rejoinder and examination of withdrawn claims 93-96, and allowance of all of pending claims 60-64 and 67-81, and 83-121.

If the Examiner believes that a telephone conversation might advance prosecution of this application, the Examiner is cordially invited to call Applicants' undersigned attorney at (404) 653-6559.

Applicants respectfully submit that the Office Action contains a number of assertions regarding the claims and the prior art. Regardless of whether any of those assertions are addressed specifically herein, Applicants respectfully decline to automatically subscribe to them.

Please grant any extensions of time required to enter this Amendment and charge any additional required fees to our Deposit Account 06-0916.

Respectfully submitted,

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GARRETT & DUNNER, L.L.P.

Dated: July 23, 2010

By: 

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